

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 2, 4-12, 14 and 15-20 are pending in the application, with claims 1 and 11 being independent claims. Claims 3 and 13 have been cancelled.

Based on the above amendment and the following remarks, Applicant respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objections to the Drawings

The Office Action dated January 19, 2005 objected to the drawings and included a Notice of Draftperson's Review. However, formal drawings were submitted on May 2, 2002 with the changes required by the January 19, 2005 Review. No response by the USPTO was received in acknowledgement of these formal drawings. Accordingly, a courtesy copy of these drawings is attached and reconsideration is respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 1-5 and 9-15 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,150,747 to Smith *et al.* ("Smith") in view of U.S. Patent No. 5,717,263 to Cox ("Cox"). In view of the foregoing amendment, The Applicant respectfully traverses this rejection.

Claims 1 and 11 recite, *inter alia*, an electric motor with a composite lamina arrangement having a first liquid barrier which includes a veil cloth containing spun bonded polymeric fibers and a mat of chopped fibers embedded in a polymeric resin layer.

As correctly stated in the first paragraph of the Office Action, Smith fails to disclose, teach or suggest a first liquid barrier which is impervious to liquids comprising at least one layer of polymeric resin material containing reinforcing fibers. However, the Office Action then relies on Cox to cure this deficiency. More specifically, the Office Action alleges that Cox teaches a first liquid barrier (32 and 46), which is impervious to liquids comprising at least one layer of polymeric resin material containing reinforcing fibers (see Office Action, ¶1). Further, the Office Action alleges that “Cox teaches that the fiber is selected from a group consisting of glass, carbon polyester and more, further disclose [sic] that different layers may be would in different configurations, for example in different helical senses.” Finally, the Office Action alleges that “Cox states that the fiber of each layer of fiber may be wound singly inherently providing a veil cloth or a collection of fibers within the composite, for example as tows.” The Applicant respectfully disagrees.

Cox fails to disclose, teach or suggest that the first liquid barrier includes a veil cloth containing spun bonded polymeric fibers and a mat of chopped fibers embedded in a polymeric resin layer, as recited in claims 1 and 11. While Cox may teach included layers (32 and 46) being made up of a resin/fiber composite mix where “the fibres may be wound helically and/or in hooped fashion within the composite in a known way (see column 1, lines 59-61),” the reference does not teach or suggest each layer having fibers spun so as to create *both* a veil cloth containing spun bonded polymeric fibers *and* a mat of chopped fibers embedded in a polymeric resin layer, as recited in the independent claims.

To be more specific, Cox discusses a known process called Filament Winding in which a series of fibers are laid down on a part while the part rotates. The fiber is laid in patterns such as helical or hoop. The different patterns laid on each other do form a layered composite.

However, these layers are not water barriers. In fact, these layers generally have a void content that allows gas or liquid to pass through. The layers do not include a veil cloth containing spun bonded polymeric fibers and a mat of chopped fibers embedded in a polymeric resin layer, as recited in claims 1 and 11.

With regard to layer 46, Cox may merely disclose the layer comprises “tows 48 of carbon fibres in an epoxy resin matrix wound circumferentially closely together at a single start helix angle [and] superimposed on the intermediate layer 37.” Cox does not teach or suggest the fibers in layer 46 being spun so as to create *either* a veil cloth containing spun bonded polymeric fibers *or* a mat of chopped fibers embedded in a polymeric resin layer. In fact, there is no mention or suggestion anywhere in the Cox disclosure of a veil cloth containing spun bonded polymeric fibers or a mat of chopped fibers embedded in a polymeric resin layer, as recited by claims 1 and 11.

With regard to layer 32, Figure 2 shows two places in which layer 46 appears in the lamina arrangement and one place in which layers 32 and 46 appear together, creating the alleged first liquid barrier. In one location, layer 46 is covered by layer 32 and, in another location, layer 50 covers layer 46. Both layers 32 and 50 are drawn with the same pattern, indicating that they are identical. There is no mention of layer 32 anywhere in the Cox disclosure, let alone the composition and structure of the layer. While Cox may disclose that layer 50 is a wear-resistant chrome layer (see Cox, column 2, lines 66-67), the reference does not teach or suggest that the included layer is either a veil cloth containing spun bonded polymeric fibers or a mat of chopped fibers embedded in a polymeric resin layer. Therefore, given the lack of disclosure in Cox regarding layer 32 and the similarities between layers 32 and 50 in the figure, layer 32 is not *either* a veil cloth containing spun bonded polymeric fibers *or* a mat of chopped fibers embedded in a polymeric resin layer.

Finally, while layers 32 and 46 may create a barrier, there is no teaching or suggestion that they comprise a barrier which contains *both* a veil cloth containing spun bonded polymeric

fibers *and* a mat of chopped fibers embedded in a polymeric resin layer, much less a liquid barrier, as required by claims 1 and 11. Even if, as alleged by the Examiner (see Office Action, ¶1), a veil cloth were inherently taught by the fact that Cox may teach that each layer of fiber may be wound singly (see Cox, column 1, lines 59-61), any inference that the first liquid barrier inherently contains both a veil cloth containing spun bonded polymeric fibers and a mat of chopped fibers embedded in a polymeric resin layer would be impermissible hindsight.

Therefore, because neither Smith nor Cox teach or suggest each and every element of the present independent claims, Smith in view of Cox does not teach the claimed invention or render it obvious. As such, the Applicant believes that claims 1 and 11 are now allowable over Smith in view of Cox and likewise claims 2, 4, 5, 9, 10, 12, 14 and 15 are also allowable as being dependent from claims 1 or 11.

Claims 6-8 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the Smith patent in view of the Cox patent and in further view of U.S. Patent No. 6,454,547 to Kohlhas *et al.* ("Kohlhas"). In view of the foregoing amendment, The Applicant respectfully traverses this rejection.

The combination of Smith, Cox and Kohlhas fail to disclose, teach or suggest each and every element of the invention as recited by claims 6-8. More particularly, the combination fail to teach or suggest a first liquid barrier which includes a veil cloth containing spun bonded polymeric fibers and a mat of chopped fibers embedded in a polymeric resin layer.

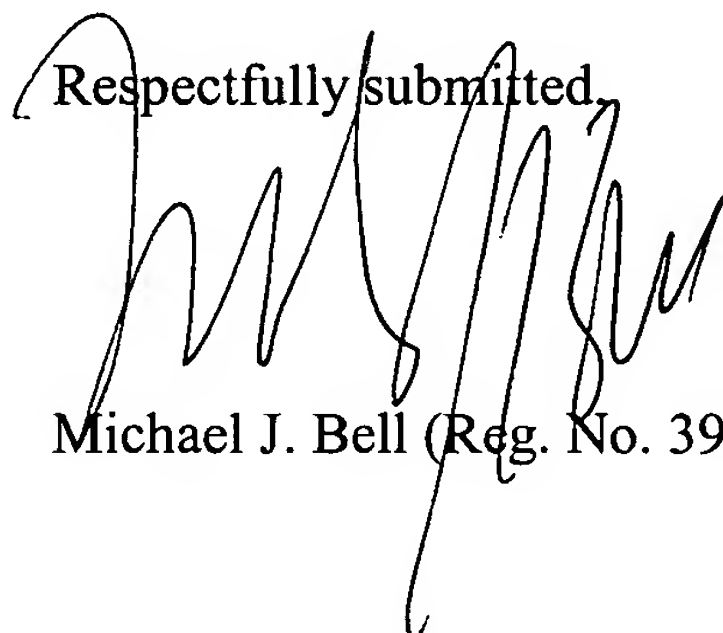
For at least the reasons given above, Smith and Cox fail to teach a first liquid barrier which includes a veil cloth containing spun bonded polymeric fibers and a mat of chopped fibers embedded in a polymeric resin layer. Kohlhas fails to cure this deficiency and, rather, teaches a delivery unit that has an electric motor with vanes arranged on the lateral surface of a rotor (see Kohlhas, abstract). Kohlhas fails to mention the use of any composite materials much less a liquid barrier containing a veil cloth and mat of chopped fibers. Accordingly, Kohlhas fails to disclose, teach or suggest the invention as recited by claims 6-8.

Therefore, Smith, Cox and Kohlhass, alone or in combination, do not teach or fairly suggest the invention as claimed in independent claims 1 and 11. As such, Applicants believe that claims 1 and 11 are now allowable as presented and, because dependent claims inherently include all the elements from claims from which they depend, claims 2, 3-10, 12, 14 and 15 should also be allowable as being dependent from allowable claims 1 and 11.

Conclusion

Applicant respectfully submits that the foregoing remarks demonstrate that entry of this amendment places the present application in condition for allowance, or in the alternative, better form for appeal. All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

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